

Work Order ID 158329***158329***

Page 1

Monday, March 20, 2017 11:53:29 AM

Item ID: D3116-5-0680

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Seal-68"

Start Date: 3/20/2017 Start Qty: 6.00

6

Cust Item ID:

Required Date: 3/21/2017 Req'd Qty: 6.00

6

Customer:

Reference: SCHEDULED

Approvals: Process Plan:

DAS
21
9-89

Date: MAR 20 2017

Tooling:

Date:

Run Start ***NR1***

QC:

Date: SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D3116

Rev A

100

0.00

100

Small Fab

Packaging

Memo

0.00

Packaging

Cut as per dwg D3116

6 MAR 20 2017

DAS
6
9-89

110

0.00

110

QC5- Inspect part completeness to step on W/O

QC

Memo

0.00

Quality Control

DAS
38
9-89

6 MAR 20 2017

120

0.00

120

Identify as per dwg & Stock Location: 8430A

Packaging

Memo

0.00

Packaging

6 MAR 20 2017

DAS
6
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By 		
							Lead hand / Supervisor Approval Verification 		
							QC / QA Coordinator Approval 		

Root Cause			FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence
Past Expiry Date	☐	Manufacturing Process	☐	OTHER : 						
Misidentified	☐	Past Due	☐							

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Page 2

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Start Date: 3/20/2017 Start Qty: 6.00

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Cust Item ID:

Required Date: 3/21/2017 Req'd Qty: 6.00

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Customer:

Reference: SCHEDULED

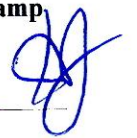
Run Start ***NR1***

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop ***NR2***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	QC21- Final Inspection - Work Order Release	0.00							
130									
QC	Memo	0.00							
Quality Control									

17/3/21 mf
17-3-21

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
QC / QA Coordinator Approval									

Root Cause				FAULT CATEGORY			
Environment ☐	☐ No Re-verification	Pressure/Forced ☐	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong		
Design ☐	☐ Operator	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐		
Doc/Data ☐	☐ Offset/Setup	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐		
Equip/Tooling ☐	☐ Supplier	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐		
Handling/Pre ☐	☐ Training	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐		
Material ☐	☐ Use for Testing	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐		
Internal Transport ☐	☐ Poor Information	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐		
Tribal Knowledge ☐	☐ Rushing	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐		
LOA ☐	☐ Product Improvement	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐		
Substation ☐	☐ Process Improvement	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐		
Past Expiry Date ☐	☐ Manufacturing Process	OTHER : ☐					
Misidentified ☐	☐ Past Due						

Picklist Print

Monday, March 20, 2017 11:54:05 AM

Page 1

Work Order ID: 158329

158329

Parent Item: D3116-5-0680

D3116-5-0680

Parent Item Name: Seal-68"

Start Date: 3/20/2017

Required Date: 3/21/2017

Start Qty: 6.00

Required Qty: 6.00

Comments: IPP A02.05.15New IssueNG
revA DD verf:EC

IPP Rev:B 10.11.02 as per

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3116-5		Manufactured	No			110	f	43.0000	5.66	33.96			

D3116-5

Seal (\$ per foot)

**

MAK 20 1911

DAS
6
9-89

Location

Loc Qty

Loc Code

ST430A

43

150606

43

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval	
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong				
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions				
Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance				
Equip/Tooling ☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect				
Handling/Pre ☐	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing				
Material ☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved				
Internal Transport ☐	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing				
Tribal Knowledge ☐	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish				
LOA ☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread				
Substation ☐	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence				
Past Expiry Date ☐	☐ Manufacturing Process	OTHER :							
Misidentified ☐	☐ Past Due								



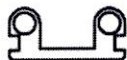
DESIGN 	DRAWN BY 	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED 	APPROVED 	DRAWING NO. D3116	REV. A SHEET 1 OF 1
DATE 02.04.15		TITLE SEAL	SCALE NTS
A	02.04.15	NEW ISSUE	



D3116-1-XXXX SEAL (REPLACES P/N 110-004-2)
WHERE XXXX IS LENGTH IN TENTHS OF INCHES
EG. 87.5" LONG = D3116-1-0875
10" LONG = D3116-1-0100
POSSIBLE SUPPLIER: AERO PRODUCTS COMPONENT SERVICES
P/N: 110-004-2 SEAL
COLOR: BLACK



D3116-3-XXXX SEAL (REPLACES P/N 110-160-1)
WHERE XXXX IS LENGTH IN TENTHS OF INCHES
EG. 87.5" LONG = D3116-3-0875
10" LONG = D3116-3-0100
POSSIBLE SUPPLIER: AERO PRODUCTS COMPONENT SERVICES
P/N: 110-160-1 SEAL
COLOR: WHITE



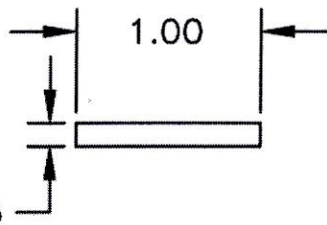
D3116-5-XXXX SEAL (REPLACES P/N 110-031-4 & 110-031-2)
WHERE XXXX IS LENGTH IN TENTHS OF INCHES
EG. 87.5" LONG = D3116-5-0875
10" LONG = D3116-5-0100
POSSIBLE SUPPLIER: AERO PRODUCTS COMPONENT SERVICES
P/N: 110-031-4 SEAL, BLACK



D3116-7-XXXX SEAL (REPLACES P/N ZX2054)
WHERE XXXX IS LENGTH IN TENTHS OF INCHES
EG. 87.5" LONG = D3116-7-0875
10" LONG = D3116-7-0100
POSSIBLE SUPPLIER: ACCURATE RUBBER/MINOR RUBBER
P/N: ZX2054 SEAL



D3116-9-XXXX SEAL (REPLACES P/N ZX1267)
WHERE XXXX IS LENGTH IN TENTHS OF INCHES
EG. 87.5" LONG = D3116-9-0875
10" LONG = D3116-9-0100
POSSIBLE SUPPLIER: ACCURATE RUBBER/MINOR RUBBER
P/N: ZX1267 SEAL



D3116-11-XXXX SEAL
WHERE XXXX IS LENGTH IN TENTHS OF INCHES
EG. 87.5" LONG = D3116-11-0875
10" LONG = D3116-11-0100
POSSIBLE SUPPLIER: LONG HORN INDUSTRIAL SUPPLY
P/N: 100S-1.00x1/8 THICK RED SILICONE TAPE
50 DUROMETER, MEETS MIL-R-5847
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
ALL DIMENSIONS ARE IN INCHES

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 158329 M/S
12-03-20

RELEASED
020506